Improving stroke care

Important changes to services for people who have a suspected stroke in east and north Hertfordshire

Published 26 August 2015
Summary of changes

The NHS in east and north Hertfordshire needs to make changes to the way that some of our residents are cared for after a stroke, particularly in the first few days.

We want our stroke patients to be treated in a hospital specialist stroke unit, known as a ‘Hyper-Acute Stroke Unit’ (HASU), for the first few days after their stroke, to improve their chances of surviving and recovering well.

There are also proposed changes to stroke services at Princess Alexandra Hospital in Harlow, Essex, which is currently used by some Hertfordshire stroke patients. As a result, we expect that, in future, patients with a suspected stroke will not be able to be treated there. They will be taken instead to their nearest hospital with a specialist stroke unit. For the vast majority of Hertfordshire patients, this will be the Lister Hospital in Stevenage.

What is a stroke?

A stroke is a serious, life-threatening medical condition that occurs when the blood supply to part of the brain is cut off. Strokes are a medical emergency and urgent treatment in hospital is essential. The sooner a person receives the right treatment for a stroke, the less brain damage is likely to happen.

There are two types of stroke:

- ischaemic: when blood flowing to the brain is blocked (accounts for around 85% of all strokes)
- haemorrhagic: when blood vessels in the brain burst.

What is the best treatment plan for stroke patients?

National advice from stroke experts says that immediately after a stroke, patients should be treated in a hospital that has specialist doctors and nurses providing round the clock care that:

- Looks after at least 600 confirmed stroke patients each year
- Sees and treats people who may have had a stroke within 30 minutes of arrival in A&E
- Provides urgent brain scans to those who need one within one hour of arrival at hospital
- Provides access to 24 hours-a-day ‘clot-busting’ drugs (known as thrombolysis).
- Admits patients to a specialist stroke ward within four hours of their arrival at hospital.
- Has daily ward rounds by a stroke consultant – including at weekends
- Is staffed by specially trained stroke nurses
- Has fully monitored beds for the first 24 hours for all stroke patients, and then as required, which could be for up to 72 hours
• Provides therapy services such as speech therapy, physiotherapy and occupational therapy seven days a week

The NHS in east and north Hertfordshire is striving to ensure that our specialist stroke unit at the Lister Hospital in Stevenage meets these criteria. We are also working with our neighbouring CCGs to ensure that other specialist stroke units that our patients may use meet the same high standards.

The National Institute for Health and Care Excellence (NICE) has produced guidance for NHS organisations to help ensure people who have a stroke have the best possible chance of making a good recovery. You can read this guidance and the evidence used to compile it on the NICE website here. More clinical evidence is available in appendix 1.

Professor Tony Rudd, National Clinical Director of Stroke said:

“*All the clinical evidence shows that stroke patients make better recoveries after a stroke if they are taken straight to a specialist stroke centre with the equipment and experienced staff able to treat them, whatever time of day or night their stroke occurs.*

“This means that in some cases an ambulance may drive a patient further, but we know that in other parts of the country where this already happens, it has saved lives.

“The plan put forward in east and north Hertfordshire will allow patients to receive high quality stroke care, maximising their chances of living well after stroke and regaining their independence.”

Sara Betsworth, Regional Head of Operations – East of England, from the Stroke Association said:

“The Stroke Association aims to support all patients in getting the help and care they need to live as independent a life as possible after a stroke.

“The NHS and its partners in east and north Hertfordshire have already demonstrated a commitment to improving care for stroke patients, right from the onset of a stroke through to a person’s rehabilitation and long term care. The Stroke Association has been closely involved in developing innovative new services such as Early Supported Discharge and has seen what a positive difference these new ways of working can make to people’s quality of life and recovery.

“We’re looking forward to continuing to work closely with commissioners and providers as Hertfordshire seeks to improve the care it offers for stroke patients.”
**Stroke care in Hertfordshire**

East and North Hertfordshire Clinical Commissioning Group (ENHCCG) is the NHS organisation which plans, pays for and monitors the quality of the majority of health services used by 580,000 people in the east and north of Hertfordshire.

**Figure 1: Map of the East and North Hertfordshire CCG area and its main hospitals**

Every year around 740 people in our area have a stroke. Of these, 600 would benefit from care in a hyper-acute stroke unit\(^1\). We are working with the organisations that provide treatment and care to patients who have strokes in our area to ensure that they make the best possible recovery.

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\(^1\) MedeAnalytics data based on HRG codes and primary diagnosis of stroke
In the last year we have:

- worked with East and North Hertfordshire NHS Trust which runs the Lister hospital to improve stroke mortality rates by increasing the number of specialist stroke staff
- introduced a 7-day stroke specialist nurse service at the Lister hospital
- worked with Hertfordshire Community NHS Trust to develop a team of specialists to help some patients to recover from strokes in their own homes, with the expert physical and psychological support they need. This is known as the ‘early supported discharge’ team
- added a further eight beds to the specialist stroke and neurological rehabilitation unit run by Hertfordshire Community NHS Trust at Danesbury, in Welwyn
- developed a stroke joint strategic needs assessment which sets out who is at risk of a stroke, what happens when people have a stroke and priorities for improving stroke care.

**Why are more changes necessary?**

We need to make further changes to the way that some of our residents are cared for after a stroke, particularly in the first few days. We want all of our stroke patients to be treated in a hospital specialist stroke unit, known as a ‘Hyper-Acute Stroke Unit (HASU), for the first few days after their stroke, to improve their chances of surviving a stroke and recovering well.

The table below shows where East and North Hertfordshire CCG residents are currently treated following a stroke or suspected stroke. Last year, 167 of our residents were treated in the stroke unit at Princess Alexandra Hospital. These patients were predominantly from Bishop’s Stortford, Sawbridgeworth, Hoddesdon, Ware and surrounding villages, or had their strokes in those places. However, most of the stroke patients treated at Princess Alexandra Hospital are from Essex.

**Table 1: Where patients living in the East and North Hertfordshire CCG area are initially treated after their stroke (2014/15)**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lister Hospital, Stevenage</td>
<td>368</td>
</tr>
<tr>
<td>Princess Alexandra Hospital, Harlow</td>
<td>167</td>
</tr>
<tr>
<td>Addenbrooke’s, Hospital, Cambridge</td>
<td>10</td>
</tr>
<tr>
<td>University College Hospital, London</td>
<td>9</td>
</tr>
<tr>
<td>North Middlesex Hospital</td>
<td>4</td>
</tr>
<tr>
<td>Watford General Hospital</td>
<td>4</td>
</tr>
<tr>
<td>Queen’s Hospital, Romford</td>
<td>3</td>
</tr>
<tr>
<td>Broomfield Hospital, Chelmsford</td>
<td>2</td>
</tr>
<tr>
<td>Other hospitals</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>595</strong></td>
</tr>
</tbody>
</table>

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2 MedeAnalytics data based on HRG codes and primary diagnosis of stroke
In future, it is proposed that patients with strokes or suspected strokes will not be taken to the Princess Alexandra Hospital immediately after their stroke.

Princess Alexandra Hospital only sees a total of around 400 stroke patients a year. This means that it cannot provide the full range of expertise that will enable it to develop the ‘hyper-acute’ specialist service that West Essex CCG and our CCG want for our patients in the immediate days after their stroke.

For more information about West Essex CCG’s plans, or to comment on them, go to www.westessexccg.nhs.uk/have-your-say

We therefore need to make alternative plans for Hertfordshire residents from the Princess Alexandra Hospital catchment area, to ensure that they can access high-quality specialist stroke treatment in future. Most of the residents from the rest of our area will be unaffected by this change as they will continue to be taken to their nearest hospital with specialist stroke services.

The implementation of these plans are subject to the successful conclusion of negotiations with our key partners, including Princess Alexandra Hospital, Queen’s Hospital, Broomfield Hospital, The Lister Hospital, Addenbrooke’s Hospital, East of England Ambulance Service and South Essex Partnership Trust.

Where will Hertfordshire patients who have strokes near Princess Alexandra Hospital be treated in future?

East and North Hertfordshire CCG has been aware of the proposed plans to change stroke services at Princess Alexandra Hospital for some time and we have worked with hospital, community and social care services to ensure that our residents will have the specialist stroke and rehabilitation services they need.

In future, Hertfordshire patients who might have previously been taken to Princess Alexandra Hospital with a suspected stroke will now be taken by the ambulance service straight to the nearest hospital with a hyper-acute specialist stroke unit. For the majority of people living in east and north Hertfordshire, this is likely to be the Lister Hospital in Stevenage. In preparation for this change and to become a full hyper-acute stroke unit, the Lister Hospital has increased the number of stroke beds and specialist stroke staff in its team.
There will be occasions when the best course of action is for the ambulance service to take Hertfordshire patients to other hospitals with specialist stroke units, nearer to where they live, such as Broomfield Hospital in Chelmsford, Queen’s Hospital in Romford or Addenbrooke’s Hospital in Cambridge. We are working closely with the East of England Ambulance Service to plan these journeys, and with the hospitals concerned to ensure that they are prepared for any changes in patient numbers.

Table 2: Projected changes in patient flows: this table shows the hospitals where east and north Hertfordshire patients are expected to be taken for their initial stroke assessment in future. 3

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Percentage of stroke patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lister Hospital, Stevenage</td>
<td>72%</td>
</tr>
<tr>
<td>Broomfield Hospital, Chelmsford</td>
<td>25%</td>
</tr>
<tr>
<td>Queen’s Hospital, Romford</td>
<td>3%</td>
</tr>
</tbody>
</table>

For some of our patients, predominantly those living in Bishop’s Stortford and Sawbridgeworth, the change will result in increased ambulance journey times. Once a 999 call has been received for a suspected stroke, ambulances would travel under ‘blue-lights’ meaning they will be able to make their way through heavier traffic conditions much faster than a car would, both to reach the patient and to take that patient to a hospital with a specialist hyper-acute stroke service.

Despite a longer initial journey, patients will have faster 24/7 access to specialist staff, brain scans and thrombolysis treatment by coming straight to a hyper-acute specialist service than if they were to attend a hospital without this expertise. Paramedics will be monitoring their condition during the journey and will pass all this information to the hospital.

‘There is strong evidence in favour of specialised stroke unit care to deliver effective acute treatments that reduce long-term brain damage and disability if given within a few hours. These recommendations have major implications for the organisation of acute medical services within hospitals. Systems need to be adapted to ensure both rapid transport into the acute stroke unit and also rapid discharge from the acute stroke unit once acute management is complete (to allow further admissions).

‘All stroke services should be organised to treat a sufficient volume of patients to ensure that their skills are maintained. At the same time, the closer a rehabilitation service is to the person’s home the more carers can be engaged and the more targeted the rehabilitation can be.’


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3 Projection modelling of approximate numbers by East and North Hertfordshire CCG
‘Unpublished findings suggest that the changes (to London’s stroke services) had a significant impact on patient mortality and morbidity and that significant savings were generated (NHS London, 2011). Data from the National Sentinel Stroke Audit has also shown that compared to the rest of England, London HASU centres have been achieving higher rates of brain scans within 24 hours of admission, lower lengths of stay and higher proportions of thrombolysed patients (Royal College of Physicians 2010).’

*Improving health and health care in London - Who will take the lead?, The Kings Fund, 2011.*

We also recognise the impact that these changes will have on the family and friends of someone who has experienced a stroke. People may have to travel further than they would have previously in order to visit someone in hospital. It is our aim to make sure that stroke patients are transferred back home or to a community hospital closer to where they live and closer to their family support network as soon as they are well enough to do so. For some patients this may be as soon as three days after their stroke; for others it may be longer, on average around 12 days.4

**Figure 2: The pathway of care for stroke patients**

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4 This may vary depending on clinical need.
So what will happen to me if I have a stroke in east or north Hertfordshire?

When a person has a stroke we know that the first few hours after the stroke are critical. If the right treatment can be given by specialist stroke clinicians during these first few hours, someone will have a much better chance of surviving the stroke and making a good recovery.

We want anyone that has a stroke in east and north Hertfordshire to be able to get the right treatment in a specialist stroke centre as quickly as possible, at any time of the day or night. Clinical evidence shows that patients make better recoveries from stroke if they are brought to a specialist centre, even if that unit is a little further away.

If you suspect that you or someone else is having a stroke, you should phone 999 immediately and ask for an ambulance.

The first 4 hours...

The ambulance service considers all suspected strokes as priority calls and will take all such patients to the nearest specialist stroke centre, where a team of stroke experts will assess patients and give them immediate treatment. For the majority of east and north Hertfordshire patients, this will be the Lister Hospital in Stevenage. We are working with the Lister to help it to develop its hyper-acute specialist stroke services.

On the journey to the unit, paramedics treat and stabilise the patient. Paramedics will telephone ahead to the emergency department (A&E) to let specialist staff know that a patient with a suspected stroke is on the way, so that treatment is given quickly when they arrive.

The first 24 hours...

Suspected stroke patients should be seen by the stroke team within 30 minutes of reaching A&E, whatever time of the day or night they arrive. Once they have been assessed, stroke patients should then have timely access to a brain scan to determine what kind of stroke has happened.

If the stroke has been caused by a blockage in the brain’s blood vessels and it isn’t too late to limit further damage to the brain, some patients will receive ‘clot-busting’ (known as thrombolysis) injections as soon as possible. For those strokes caused by bleeding in the brain, medication will be given, or surgery in a small number of cases.

Patients are closely monitored for the first 24 hours after their stroke while more tests and investigations take place. This will help the team to find out why a stroke has occurred and what treatment may be needed to help prevent any more from happening. During this time, the specialist team will thoroughly assess the patient. This assessment will include checking the patient’s ability to swallow, their speech and their mobility. A plan for the patient’s future care will then be drawn up to meet their individual needs.
For every 1,000 patients treated with thrombolysis within three hours, about 100 more will be alive and live independently than 1,000 patients not treated with thrombolysis. ⁵

The first 72 hours...

Close monitoring of the patient will continue and medication will begin, if needed. Specialist stroke wards have a higher ratio of nurses for each bed than many other hospital wards, because of the intensive monitoring that is needed in the first few days after a stroke. A stroke consultant is also on duty and carrying out regular ward rounds. When they arrive on the ward, the patient will be assessed by a team of nurses and therapists to agree a rehabilitation plan. Treatment such as physiotherapy and speech and language therapy will begin for all patients who will benefit and this plan will be explained to the patient and his/her family.

The rehabilitation phase...

Stroke patients who are cared for on stroke wards are more likely to be alive, independent and living at home after one year than if they are cared for on other wards. ⁶

Within 72 hours of a patient arriving in hospital, they will be transferred from the hyper-acute stroke unit, if they are well enough. If the patient needs further hospital treatment their care will continue according to their needs. Patients who remain in hospital stay on average for 12 days after their stroke, where they continue to receive specialist therapy and nursing support.

Patients who have experienced a severe stroke, who are medically fit and would benefit from further rehabilitation after their initial hospital stay will be transferred to a community hospital. This would normally be Danesbury neurological rehabilitation centre in Welwyn or the Herts and Essex Hospital in Bishop’s Stortford. The hospital will liaise closely with community teams and the family of the stroke patient to plan for the patient to be transferred home. Most people return to their usual place of residence after a stroke.


“My speech has improved greatly, while I still struggle with it all I think I am doing well and I am fighting it with all I have.”

“Again thank you so, so much for everything. You were always professional and dignified in your job and you made a huge impact on me and my recovery.”

*Feedback from stroke patients who were looked after at Danesbury Neurological Centre*

Some patients who have experienced a mild to moderate stroke are well enough to be discharged home, with the support of a community team to continue their rehabilitation if necessary. The ‘early supported discharge’ team will provide up to six weeks of specialist stroke rehabilitation to patients in their own homes. The team includes stroke specialist physiotherapists, occupational therapists, nurses, clinical psychologists, rehabilitation assistants and social workers. The intensity of the rehabilitation sessions will be dependent on the patient’s clinical need and could be delivered up to five times per week.

**About the early supported discharge service**

The team began treating patients in November 2014.

- Around 40% of all stroke patients in our area are cared for by the ESD team.
- The average length of time a patient is looked after by the ESD team is 37 days. By this point, more than 86% of patients have met the goals set at the start of their rehabilitation with additional support available from community teams for those who need it once they are no longer under the care of the ESD team.
- Patients who have been cared for by the ESD team rate it very highly. 98% of people would recommend the service to a family member or friend.
Sunday, November 23 is a day that will always be in my mind. I enjoyed morning worship at my local Baptist church, in the afternoon, at Garden City Cinema, the film of the Bolshoi Ballet was most enjoyable.

“Later that evening, sitting in my chair watching TV, and without any pain, I had a stroke without knowing it.

“I went to bed, but later in the night I called 999 and the ambulance soon arrived and whisked me off to the Lister A&E. I was then transferred to Pirton Ward which takes care of stroke patients. All this was a very new experience for me.

“The care and attention of doctors, nurses and support staff was first rate. Even the food was good and tasty.

“After four days of care in hospital I was sent back home, now with a dedicated team of experts in physiotherapy, occupational therapy all looking after me at home with a view to getting me on the move again and back to normal.

“The way I have been looked after by Hertfordshire’s NHS is the tops in every way. Many thanks to all of you for your dedication. “

*Letter from a stroke patient published in the Welwyn Hatfield Times, 10 December 2014*

For all patients, if further support is needed, the stroke teams will arrange for this with other health, social care or voluntary sector teams. Everyone who has a stroke will have their health and wellbeing assessed at a six-month check by the community stroke team, followed by a yearly check-up by their GP.

**What happens if I experience a TIA or ‘mini-stroke’?**

A transient ischaemic attack which is sometimes called a TIA, ‘mini-stroke’ or ‘warning stroke’ happens because of a temporary lack of blood to part of the brain. This causes short-term problems and symptoms usually disappear within 24 hours. A TIA is a warning sign - around 10% of patients go on to have a full stroke within a week of having a TIA. Therefore, it is important not to ignore the signs and act promptly.

People who experience a TIA or ‘mini-stroke’ and who do not need to be admitted to hospital will continue to receive their outpatient care at their local hospital, including Princess Alexandra Hospital.

If, in the weeks or months after a TIA, a patient goes on to have a full stroke, they will be taken to the Lister Hospital for their initial treatment.
What if my condition turns out not to be a stroke?

Not all patients who arrive at hospital with a suspected stroke, will be diagnosed with a confirmed stroke. Some other conditions may have stroke-like symptoms but following assessment and scans a stroke will be ruled out. There are a number of different conditions which may present in this way and while investigations are carried out, the patient may be admitted to the stroke unit. However, once a stroke has been ruled out, the patient will be transferred to somewhere that can best meet their needs; this may be a transfer to another hospital, another ward or they may be discharged home.

How will family and friends get to a hospital further away from their home?

The NHS is conscious of the additional travel times that may be faced by family and friends if their loved one is taken into a hospital further away from their home. Wherever possible, the ambulance service will transport a close relative or friend in the ambulance alongside the patient, where this is in the patient’s best interest.

For friends and family without access to their own transport, there are bus services which serve the hospitals where stroke patients will be taken initially. For example, bus 700 links Stevenage to Bishop’s Stortford, calling at the Lister Hospital. Its route takes it from Stansted Airport to Stevenage with various stops in Bishop’s Stortford and Little Hadham. Buses 308 and 42A would take you from Bishop’s Stortford to Broomfield Hospital in Chelmsford.

Community transport is available in the Broxbourne, East Herts and Welwyn Hatfield council areas which offers affordable transport to people who do not have access a car or who cannot use public transport. Further details are available here:

Broxbourne community transport
East Herts community transport
Welwyn Hatfield community transport
I would like to comment on these changes, how do I go about it?

If you would like to contact East and North Hertfordshire Clinical Commissioning Group about our plans to improve stroke treatment and care, please either:

- Email us: engagement@enhertsccg.nhs.uk
- Complete the online form on our website: www.enhertsccg.nhs.uk
- Print out the form overleaf, fill in your views and return it to us at our FREEPOST address (no stamp needed):

  Freepost RLU – CKLC – AJSX
  Communications Department
  NHS East and North Hertfordshire CCG
  Charter House
  Parkway
  Welwyn Garden City
  AL8 6JL
- Phone us on 07920 275060. If we are unable to answer your call, please leave a message giving us your views and provide a phone number or email address that we can contact you on.
- Invite us to speak to your community group – we are keen to take opportunities to speak to local patient and community groups who are interested in what we being proposed. Please email us on engagement@enhertsccg.nhs.uk or phone us on 07920 275060 if you would like us to visit your group.

Please submit your feedback by 5pm on Friday 23 October 2015.

Following this date, the CCG Governing Body will consider all feedback.

If you need paper copies of this document, or would like it provided in large print, a different language, or an audio version, please contact us on the details above. This document is also available on our website here: www.enhertsccg.nhs.uk

To comment on the specific changes proposed at Princess Alexandra Hospital, please visit the West Essex CCG website: www.westesseexccg.nhs.uk or phone 01992 566140.
My views on East and North Hertfordshire CCG’s plans to improve stroke treatment and care:

Please continue on a separate sheet if necessary.

About me

These questions are optional, but answering them will help the CCG to understand a bit more about the people who are giving us their views.

☐ I have experienced a stroke
☐ I have looked after a family member or close friend who has had a stroke
☐ I work in stroke care in Hertfordshire or Essex

Are you ☐ male or ☐ female?

What is your ethnic group?

☐ a) White ☐ d) Black / African / Caribbean / Black British
☐ b) Mixed / multiple ethnic groups ☐ e) Other ethnic group
☐ c) Asian / Asian British

Your name: __________________________

Your postcode: ______________________

Your email address: __________________

Your age: ☐ 18-24 ☐ 25-40 ☐ 41-64 ☐ 65-74 ☐ Over 75 years
### Appendix 1: Further reading

<table>
<thead>
<tr>
<th>Guidance</th>
<th>Publisher</th>
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<tbody>
<tr>
<td>Stroke: Diagnosis and initial management of acute stroke and transient ischaemic attack (TIA) - CG68 (2008)</td>
<td>NICE</td>
</tr>
<tr>
<td>Stroke rehabilitation: Long-term rehabilitation after stroke - CG162 (2013)</td>
<td>NICE</td>
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<tr>
<td>STROKE SERVICE STANDARDS (June 2014)</td>
<td>British Association of Stroke Physicians</td>
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<tr>
<td>Stroke Guidelines</td>
<td>Scottish intercollegiate guidelines network</td>
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<td>Stroke Service Specification (2013)</td>
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